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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,865	03/18/2004	Philippe Jerome Didier Riviere	88265-7344	5444
29157 K&L Gates LLP P.O. Box 1135 CHICAGO, IL 60690	7590 04/06/2009			
EXAMINER				
CHAWLA, JYOTI				
ART UNIT		PAPER NUMBER		
1794				
NOTIFICATION DATE		DELIVERY MODE		
04/06/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

chicago.patents@klgates.com

Office Action Summary

Application No.

10/802,865

Applicant(s)

RIVIERE ET AL.

Examiner

JYOTI CHAWLA

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/09/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-27 is/are pending in the application.
- 4a) Of the above claim(s) 17-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/06)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

In view of the Appeal Brief filed on December 9, 2008, **PROSECUTION IS HEREBY REOPENED**. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Status of claims

Claims 1-5, 7-27 are pending, claims 17-27 are withdrawn from consideration pertaining to a non-elected invention and elected claims 1-5, 7-16 and are examined in the current application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 5 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites "wherein the thickener is carob gum, guar gum, a carrageen, an alginate, gelatin, a carboxymethylcellulose (CMC) and the emulsifier is a mono or and diglycerides of a fatty acid, a sucroester or egg yolk". The list of thickeners does not include "and" or an "or" relationship, and hence the relationship is not clear. Similarly, the emulsifiers recite "or and" and it is not clear what that means. For the purposes of this office action, it will be assumed that the recitation is equivalent of "wherein the thickener is carob gum, guar gum, a carrageen, an alginate, gelatin, or a carboxymethylcellulose (CMC); and the emulsifier is a mono or diglycerides of a fatty acid, a sucroester or egg yolk".

Claim 16 recites "comprises adjuvants, flavoring inclusions or other preparations" (emphasis added). As recited the phrase "other preparations" is indefinite as it is not clear as to what preparations and what type of preparations are included or excluded in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

(A) Claims 1-5, 9-13 and 15-16 rejected under 35 U.S.C. 103(a) as being unpatentable over Whelan et al., (US 5,084,295), hereinafter Whelan, in view of Wolfmeyer (US 3,335,013), hereinafter Wolfmeyer.

Regarding claim 1, Whelan teaches a frozen dessert composition comprising frozen water, proteins, fat, a sweetening agent mixture and at least one stabilizing agent (Column 6, lines 1-8), wherein at least 90% by weight of the sweetening agent mixture comprises glucose polymers and glucose (see Column 12, lines 5-11, which includes the combination that 100% of the sweetening agent mixture may comprise maltose and glucose; also see and Column 6, lines 67-68), the glucose polymers comprising n molecules of glucose, wherein n is an integer between 2 and 10, inclusive (such as maltose, see Column 12, lines 5-7, where n=2 as maltose is a disaccharide with two units of glucose), wherein the sweetening agent mixture (i.e. nutritive carbohydrate sweetener described by Whelan in Column 12, lines 5-11) constitutes from 6 to 30% of the total weight of the frozen dessert composition (Column 12, lines 13-16 and Column 6, lines 67-68), which falls in the recited range of 6 to 30% of the total weight of the

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frozen dessert composition. Whelan also teaches that the stabilizing agent comprises a nucleating agent (such as microcrystalline cellulose, see Column 14, lines 48-54 – this is the same nucleating agent also listed in applicant's specification, page 4, lines 16-25) for water crystals during freezing of the frozen dessert composition.

Whelan does not teach that the glucose polymers represent "from 10 to 50% of the weight sweetening agent mixture". Wolfmeyer teaches a frozen dessert composition comprising a sweetening agent mixture which may comprise 90% or higher by weight of the sweetening agent mixture comprising glucose polymers such as Maltose, and glucose, i.e. Dextrose (see Wolfmeyer, Column 2, lines 70-73 and Column 3, lines 1-7), wherein the glucose polymers (i.e. maltose) may represent 30% or 40% of the weight of the sweetening agent mixture (see Column 3, line 6), which falls in the recited range of from 10 to 50% of the weight sweetening agent mixture. It would have been obvious to one of ordinary skills in the art at the time of the invention to modify Whelan so that the glucose polymers represent from 10 to 50% (for example, 30%) of the weight sweetening agent mixture. One of ordinary skill in the art would have been motivated to modify Whelan for at least the purpose of achieving specific properties such as freeze-thaw stability or chewiness while still maintaining the desired taste (Column 1, lines 15-70).

Given that Whalen modified by Wolfmeyer, teaches the claimed composition, it must follow that the composition, independently of any incorporation of gas, is malleable and extrudable at freezing temperatures, as claimed.

Regarding claim 2, Whelan teaches the stabilizing agent may comprise microcrystalline cellulose (Column 14, lines 48-54) in an amount of up to about 1% (Column 14, lines 57-61 and Column 6, lines 67-68), which includes the recited range of from 0.1 to 1% by weight relative to the total weight of the composition.

Regarding claim 3, Whelan teaches that the frozen water may be present in an amount of at least 50% (Column 14, lines 26-30 and Column 6, lines 67-68), which falls in the recited range of from 40 to 62% by weight relative to the total weight of the composition.

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Regarding claim 4, Whelan teaches that the at least one stabilizing agent includes an emulsifier or thickener (such as various gums, see Column 14, lines 48-53), with all stabilizing agents being present in an amount of about 1% (Column 14, lines 57-61 and Column 6, lines 67-68), which falls in the recited range of from 0.3 to 2.7% by weight relative to the total weight of the composition.

Regarding claim 5, Whelan teaches that the thickener may be guar gum or other commonly known gums in the art (Column 14, lines 48-56) and the emulsifier is a mono or diglycerides of a fatty acid (Column 13, lines 61-68).

Regarding claim 9, Whelan teaches that fat is present in the composition in an amount of from about 2 to 20% (Column 4, lines 56-61), which includes the claimed range of 4 to 20% by weight relative to the total weight of the composition.

Regarding claims 10 and 11, Whelan teaches that the fat may be sunflower oil (Column 9, lines 1-11) or milkfat (Column 7, lines 38-40, which includes butter or any associated oil fractions, such as butter oil fraction), and thus, the fat contains at least component selected from the group consisting of one of one fat of plant origin having an onset of solidification temperature of less than 0°C, one or more fats of plant or animal origin having an onset of solidification temperature of between 0 and 40°C and combination thereof.

Regarding claim 12, Whelan teaches that the proteins are present in an amount of from about 3 to about 15% (Column 11, lines 27-29), which falls in the recited range of 3 to 18% by weight relative to the total weight of the composition.

Regarding claim 13, Whelan teaches that the proteins are proteins of plant origin (such as soy, see Column 11, lines 59-61) or proteins of animal origin provided by whole or skimmed milk or a derivative of milk origin (Column 11, lines 35-51).

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Regarding claim 15, Whelan teaches that the proteins of plant origin are obtained from leguminous plants (such as soy, see Column 11, lines 59-61).

Regarding claim 16, Whelan teaches that the frozen dessert composition comprises flavoring inclusions (Column 13, lines 20-50).

(B) Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whelan and Wolfmeyer as applied to claims 1 above, and further in view of NPL reference Wiley's Encyclopedia of Food Science and Technology, 2nd Edition (pages 2242 & 2271), hereinafter Wiley's.

Whelan in view of Wolfmeyer has been applied to claims 1-5, 9-13, 15-16 above.

Regarding claim 7, Whelan teaches substantially the frozen dessert composition including glucose syrup (or corn syrup, see Column 12, lines 5-11, also see note below) but does not teach that the glucose syrup comprises "less than 1% by weight of fructose". Wiley's (refer to Table 4 on page 2271) teaches that glucose syrups that comprise less than 1% by weight of fructose are known (page 2271). Wiley's further discloses that fructose is more lipogenic than glucose, and can cause increase in blood pressure and other health problems (page 2242, Column 1, lines 3-8). Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify Whelan so that the glucose syrup comprises less than 1% by weight of fructose. One of ordinary skill in the art would have been motivated to modify Whelan for at least the purpose of achieving required sweetness while limiting fructose content to a specific low value to avoid the known disadvantage of lipogenic nature of fructose that can aggravate certain health conditions (see Wiley's, page 2242, Column 1, lines 3-8).

Note that NPL reference Dictionary of Food Ingredients, which describes corn syrup on page 40, also states that corn syrup is also termed glucose syrup.

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(C) Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whelan and Wolfmeyer as applied to claim 1 above, and further in view of Cole (US 4,452,824), hereinafter Cole.

Whelan in view of Wolfmeyer has been applied to claims 1-5, 9-13, and 15-16 above.

Regarding claim 8, Whelan teaches substantially the frozen dessert composition but does not teach that the composition further comprises "from 1 to 3% by weight of glycerol". Cole teaches a frozen dessert composition, wherein the composition comprises 1 to 5% glycerol (Column 2, 35-50), which includes the claimed range of from 1 to 3% by weight of glycerol. It would have been obvious to one of ordinary skills in the art at the time of the invention to modify Whelan so that the composition further comprises from 1 to 3% by weight of glycerol. One of ordinary skill in the art would have been motivated to modify Whelan for at least the purpose of depressing freezing point and to impart increased softness to a frozen product (see Cole, Column 2, lines 35-41) to achieve a specific level of malleability or extrudability.

(D) Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whelan and Wolfmeyer as applied to claims 1, 12 and 13 above, and further in view of Harju (US 4,855,056), hereinafter Harju.

Whelan in view of Wolfmeyer has been applied to claims 1-5, 9-13, and 15-16 above.

Regarding claim 14, Whelan teaches substantially the frozen dessert composition including that the derivatives of milk origin may be whey (Column 11, lines 35-51) but does not teach that the whey is "demineralized whey" or "demineralized and lactose-free whey". Harju teaches that whey added to frozen dessert compositions like ice-cream may be demineralized whey (Column 1, lines 18-24). It would have been

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obvious to one of ordinary skills in the art at the time of the invention to modify Whelan so that the whey is demineralized whey. One of ordinary skill in the art would have been motivated to modify Whelan for at least the purpose of removing excess salt from whey, thus making it more suitable for addition to foodstuffs (see Harju, Column 1, lines 18-24).

Response to Arguments

Applicant's arguments filed December 9, 2008, regarding the rejection of claims 1-5, 7-16 have been fully considered but are moot in view of the new ground(s) of rejection.

Claims 1-5, 7-16 remain rejected for the reasons of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTI CHAWLA whose telephone number is (571)272-8212. The examiner can normally be reached on 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JC/
Examiner
Art Unit 1794

/JENNIFER MCNEIL/

Supervisory Patent Examiner, Art Unit 1794